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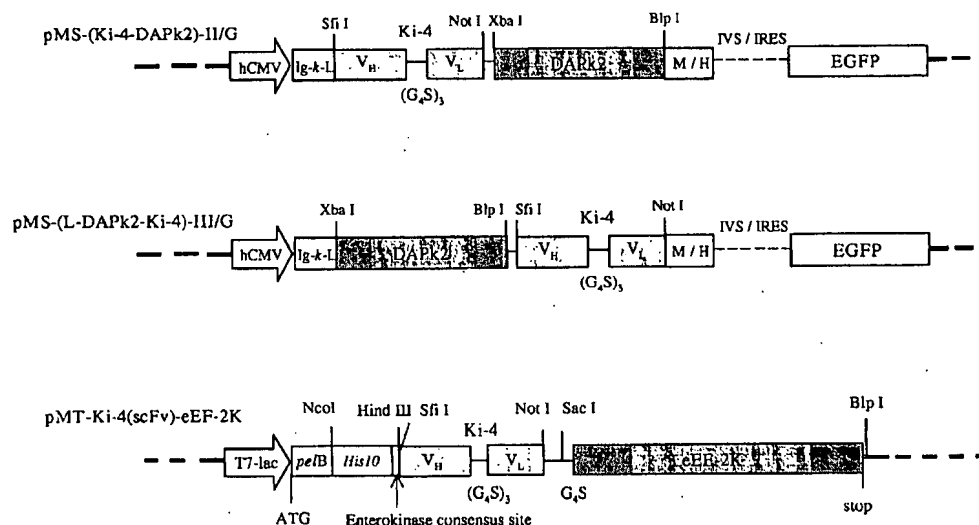
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[Continued on next page]

(54) Title: IMMUNOKINASES



(57) Abstract: A synthetic, soluble, endogenous complex formed from at least one component A and at least one component B, whereby component A comprises a binding domain for extra-cellular surface structures that internalize upon binding of component A of said complex, and component B has a constitutive catalytic kinase activity and effects cell biosynthesis/signalling including cell death after internalization. The complex allows to influence the growth and the physiology of cells. In particular said complex, nucleic acid molecules encoding it, cells transfected or transformed with these nucleic acid molecules are usable for the preparation of medicaments for the treatment of proliferative diseases, inflammatory diseases, allergies and autoimmune diseases.



— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report:  
27 October 2005

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2005/050131

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C12N9/12 C07K19/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C12N C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, PAJ, Sequence Search, EMBASE, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 5 670 324 A (LITTMAN DAN ET AL) 23 September 1997 (1997-09-23) abstract figures 1,2 column 1, paragraph 1; examples 1-7D column 1, paragraph 2 column 2, paragraph 1 column 3, paragraph 4 - column 4, paragraph 2 column 6, paragraph 4 column 7, paragraph 3 column 9, paragraph 2 claims 1-10</p> <p style="text-align: center;">----- -/--</p>	<p>1-9,11, 12,14-24</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

22 August 2005

Date of mailing of the international search report

29/08/2005

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2005/050131

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 2002/176851 A1 (SEED ET AL.) 28 November 2002 (2002-11-28) abstract figure 1 paragraph '0003! paragraph '0023! paragraph '0026! paragraph '0031! - paragraph '0034!; claims 1-40</p>	1-9,11, 12,14-24
X	<p>US 5 935 835 A (MARSHALL LISA ET AL) 10 August 1999 (1999-08-10) abstract column 9, line 52 - column 10, line 33; claims 1-12</p>	1-9,11, 12,14-24
X	<p>US 2002/151684 A1 (MAYER ET AL.) 17 October 2002 (2002-10-17) abstract paragraph '0003! paragraph '0004! paragraph '0009! - paragraph '0011! column 34</p>	1-9,11, 12,14-24
T	<p>HAXHINASTO S. ET AL.: "synergistic B cell activation by CD40 and the B cell antigen receptor" THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 279, no. 4, 2004, pages 2575-2582, XP002273864</p>	

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP2005/050131

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 10, 13  
because they relate to subject matter not required to be searched by this Authority, namely:  
Although claims 23 and 24 are directed to a diagnostic method practised on the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.: 10, 13  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

## Continuation of Box II.1

Although claims 23 and 24 are directed to a diagnostic method practised on the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

## Continuation of Box II.2

Claims Nos.: 10, 13

Present claims 10, 13 relate to an extremely large number of possible compounds/products. In fact a lack of clarity (and conciseness) within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of the claims impossible.

In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the product/compound by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-9, 11, 12, 14-24

a complex of a component A and B wherein A comprises a binding domain for cellular surface structures and B is a kinase. Said complex has SEQ ID No 2

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2. claims: 1-9, 11, 12, 14-24

a complex of a component A and B wherein A comprises a binding domain for cellular surface structures and B is a kinase. Said complex has SEQ ID No 4

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3. claims: 1-9, 11, 12, 14-24

a complex of a component A and B wherein A comprises a binding domain for cellular surface structures and B is a kinase. Said complex has SEQ ID No 6

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4. claims: 1-9, 11, 12, 14-24

inventions 4-3183.  
a complex of a component A and B wherein A comprises a binding domain for cellular surface structures and B is a kinase. Wherein A selected from the list as in claims 2 and 3 (at least 54 compounds) and B as in claims 6-9 (ie. at least 59 kinases listed)

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2005/050131

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Information on patent family members

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